SECTION 3

FUNCTIONS RELATED TO THE OPERATION OF THE DATA SYSTEM

3.1 Initiation Procedures. As stated in section 2.3.1 the focal points send the forms to the Data Bank as they are prepared rather than holding the forms and sending them all at once. The forms should be submitted with a cover letter so that there will never be any question as to where they came from. A form letter may be developed for this purpose. Also, it is recommended that the person at the focal point who prepares each form place his name or initials on the top of the form so that if any question arises the specific person can be contacted. Requests for interrogations should be in writing but telephone requests for urgent requirements will be accepted.

3.2 Input

3.2.1 Procuring Activity Responsibility - The procuring activities in each service or agency will require the contractor to submit an MSDS as required in DAR Clause 7-104.98. This clause references FED STD 313A which identifies Federal Supply Classes in which hazardous materials are likely to appear. It is recommended that each service utilize procurement clauses that require the contractor to certify that the item does not meet the def init ion of a hazardous material as defined in FED STD 313A or to furnish an MSDS whenever the potential for hazard exists. This clause must be applied to, but is not limited to, the Federal Supply Classes listed in Table I of FED STD 313A. The FSCS listed in Table II of FED STD 313A and any items suspected of being hazardous in other FSCS should be subjected to the use of the clause as well. The procuring activity is responsible for assuring that the contractor actually submits MSDSs in accordance with the contract. Also, it is recommended that the procuring activity use a forwarding letter when sending MSDSs to the focal point so the focal point personnel will know which procuring activity was responsible for request ing the MSDS. The focal points may work through the Contracting Officer if there is a need to require the contractor to provide more inf ormat ion if the original data submission was not acceptable. (This does not preclude, at the option of each service/agency, the focal points going directly to the contractor for clarification of additional data.)

3.2.2 Focal Point Responsibility - The focal point will review the MSDS to ensure that the data are complete, reasonable, and legible and will work wit h the contractor, when necessary, to develop the most complete data available. The focal point will also assure that the Addendum Worksheet is completed and that the Transportation Data is developed and input when applicable. The MSDS will be utilized in developing the Transportation Data but it does not necessarily have to be the only source for the development of this data. The MSDS/Addendum Worksheet and Transportation Data Sheets will be forwarded to the Data Bank. The focal point will be the one contact point between the Data Bank and each service and all requests made of the Data Bank should go through the focal point.

3.2.2.1 Addendum Worksheet

3.2.2.1.1 Characters Allowed. The following types of characters are allowed in each data field depending on the edit criteria:

a. Alpha Characters - Will accept A through Z or blank. All upper and lower case letters will be input as upper case letters only.

b. General Characters - Will accept any character, including blank, decimal, parenthesis, plus/minus signs etc. , as well as alpha and numeric characters. Appendix A lists the characters that are acceptable in the system. Any nonapproved characters on the MSDS must be changed by the focal point to the acceptable characters.

c. Integer Characters - Will accept O through 9 only.

d. Numeric Characters - Will accept O through 9, special characters but will. not accept alpha.

NOTE 1: For numbers less than 1.0, a ‘O should be entered to the left of the decimal (i.e. 0.895 instead of .895). This is essential in the prevention of clerical errors.

NOTE 2: All data entries are to be left justified (i.e. begin all entries in the extreme left of the data field).

NOTE 3: Each of the data elements listed below contain 6 sections (a - f). Special attention should be drawn to the Type of Character allowed (section c), the Mandatory Requirement (section d) and Special Instructions (section f) because these sect ions contain the rules for data entry which, if not followed precisely, will cause data to be rejected from the system.

3.2.2.1.2 Detailed Listing of Data Elements. Below is a detailed listing of the data elements that appear on the Addendum Worksheet. Mandatory data elements are so noted. The size of the field refers to both input and output and includes special characters such as minus signs or decimal points.

la. Field Name - Date
b. Size – 5
c. Type Character - Integer
d. Mandatory - Yes
e. Definition - This is the date that the focal point reviews the data and inputs it to the system. It is used to determine the general age of the data in the data bank.
f. Special Instructions - The julian date format is used - Example 78191.

2a. Field Name - Action Code
b. Size - 1
c. Type Characters - Alpha
d. Mandatory - Yes
e. Def init ion - This is a one-position code to indicate whether the data is an add, change or delete.
f. Special Instructions - It will be the responsibility y of the focal point to identify whether data submitted is an add, change or delete to this file. The late st output product should be reviewed be f ore assigning the code.

The three actions and the codes are defined and may be accomplished as follows :

ADD - The addition of a new MSDS or TDS to the file. Mark “A” for add in the blank for action code.

CHANGE - Consists of an addition, change, or deletion of individual data elements to an MSDS or TDS already in file. Mark “CHANGE” to the top of the MSDS or TDS. Mark “C” for change in the blank for action code on the Addendum Worksheet. In addition the section at the bottom of the Addendum Worksheet must be completed whenever

a "C" is placed in the action code. An "X" is to be placed in the block for the section of the MSDS that contained the data element that was changed. The input clerk will reinput all of the data elements in that section but will ignore data in the sections not marked with an "X". If all of the sections contain changes or if it is desired that the entire MSDS be re input then the block marked "ALL" will be marked. The focal point does not have to change all of the items in the section, only the individual data element. However the applicable section must be marked.

An example is shown below:

ALL	I	II	III	IV	V	VI	VII	VIII	IX
☐	☐	☐	☐	☐	☒	☐	☐	☐	☐

In the sample above a specific data element in Section V of the MSDS was changed.

The blocks above do not need to be completed if a data element that appears only on the Addendum Worksheet is changed.

DELETE - The deletion of NSN, FSCM, and part number indicator currently in file. Mark "D" (for delete) in the blank for the action code on the Addendum Worksheet. An item should be deleted from the list only when the focal point determines that the item is not now nor has ever been hazardous and was in the list originally because of erroneous data. An item should not be removed from the list because it was once bought as hazardous, but is no longer bought that way due to a change in formulation or is no longer an active item. Inactive or old items eventually require disposal and the hazardous properties must be known at that time. No MSDS will be submitted for deletion act ions. For a change in f ormulat ion where an item was hazardous by a previous formulation, the MSDS on the old item should be changed in the part number/trade name field to indicate that the item was hazardous when made prior to a specified date, and a second entry made to indicate the item is no longer hazardous. This would be a change action.

3a. Field Name - Focal Point Indicator
b. Size - 1
c. Type Characters - Alpha
d. Mandatory - Yes
e. Definition - This is the one position alpha code indicating the focal point responsible for the input.
f. Special Instructions - Only one focal point indicator is allowed per one NSN, FSCM, P/N indicator. The computer will reject duplicate NSNS, FSCMs and P/N Indicators for different focal point indicators. If the above situation occurs, the focal points involved should reach an agreement as to which one has responsibility for inputting the data. The focal point of the managing service should input the data. The following are the only focal point indicator codes authorized for input to the system.

A - Army
D - Defense Logistics Agency
F - Air Force
G - Gene ral Services Administration
M - Marine Corps
N - Navy
P - Defense Mapping Agency
S - Nat ional Security Agency

The addresses and telephone numbers of the focal points are given in Appendix F.

NOTE 1: In the unique case where the Navy is inputting the data for the Marine Corps, the Navy Focal Point should use a "M" for Marine Corps managed items.

NOTE 2: If a service/agency is not listed as a focal point, that organizat ion should request assignment of a focal point code from DGSC.

4.a. Field Name - NSN/Local Stock Number (ACN-Activity Control Number).

b. Size - 13

c. Type Characters - Integer and General (The first six characters are integers only and the last seven can be both alpha and integer - to accommodate Local Stock Numbers, ACNs, and stock numbers arbitrarily assigned by the focal points in order to input items into the system which do not have NSNS, LSNS or ACNS assigned to them).

d. Mandatory - Yes

e. Definition - This field can consist of three types of numbers. They are (1) the Nat ional Stock Number (NSN), (2) the Local Stock Number/Activity Cent rol Number (LSN/ACN), or (3) the Focal Point assigned Stock Number. This last category applies when an item is not assigned an NSN or an LSN/ACN but is hazardous and the decision is made to input the data to the system. These types of items are normally bought by part number only.

f. Special Instructions - The following applies when there is a need for a focal point assigned stock number as described in the definition above: Since the program requires three elements for input (NSN(LSN/ACN), FSCM and Part Number Indicator) and since the FSCM and P/N indicator are obtainable it will be the re sponsibility of the focal point to assign a stock number in order to input the data to the system. To accomplish this the focal point will develop a 13 position number that has the focal point indicator as the seventh position of the stock number (Example - a number assigned by DLA "might be 1111 -00-D12-3456; a number assigned by the Air Force might be 1000-00-F44-1111). The other 12 characters in the field would be chosen at the discretion of the focal point. However care should be taken not to duplicate your own numbers. A sequential numbering system is recommended. With the focal point indicator as the seventh position of this number there would be no chance of two focal points duplicating one another. Remember, this situation occurs when there is not an NSN or LSN/ACN already assigned to an item.

For Nat ionally Stock Numbered items the computer will edit the first four positions of the NSN, which is the Federal Supply Class (FSC) against the approved FSCS in Cataloging Handbook HZ-1, The 5th and 6th posit ions will be edited against the approved country codes in DoD 4100.39-M, Appendix 3-D-1. 15, National Codification Bureau Code Table. Thus care should be taken to ensure that the FSC and the Country Code is correct. This edit will only apply to NSNs. It will not apply to LSNs/ACNs or Focal Point assigned Stock Numbers. The data system is designed to accept local stock numbers. However, a focal point may, as a matter of policy, elect not to include these stock numbers if it is decided that their inclusion would not be useful.

5.a. Field Name - Federal Supply Code for Manufacturers/Nonmanuf acturers (FSCM/FSCNM).

b. Size - 5

c. Type Characters - General (Consists of either alpha or integer in the first two spaces and integer in the last three).

d. Mandatory - Yes

e. Definition - This is the Federal Supply Code for manufacturers/non-manufacturers. It is a unique code assigned to any contractor who does business with the Government. For manufacturers it is generally all integers (i.e. 19139) whereas

distributors generally have an alpha in the first or second position (i.e. 4A253).

f. Special Instructions - The procuring act ivit y is responsible for assuring that the FSCM is annotated on the MSDS but the focal points can also determine the number if necessary. For certain items such as those bought by Federal or Military Specifications or Standards the contractor may not be known when certain data elements are initially developed for input to the system. For these it is permissible to use the general FSCM assigned to specif-ications developed by the General Services Administration or the Department of Defense. For specs developed by GSA the FSCM is 8134.8 and for DoD Specs the FSCM is 81349. Other such general FSCMs, such as those Purchase Descriptions developed by a specific Government activity or those assigned to industry or trade associations (i.e. American Chemical Society), are listed in the Name to Code Section of the FSCM publication (Cataloging Handbook H-8). By assigning these general codes it will be possible to retain data in the system when a specific manufacturer is not known or the item has not been bought. For those cases where a distributor submits an MSDS, prepared by a manufacturer, the distributor' s FSCM code should be used.

6. a. Field Name - Part Number Indicator.
b. Size - 1
c. Type Characters - A
d. Mandatory - Yes
e. Definition - This is a one-position code developed to facilitate program processing by eliminating the necessity for mat thing part numbers position by posit ion.

f. Special Instruction - The code must be input by the focal point for each part number or trade name submitted and will be used to differentiate part numbers for each contractor. The first part number/trade name for a particular contractor will be coded A; the second part number for the same contractor under that same stock number will be B; etc. The only time any letter other than an "A" would be used is when there is more than one part number/trade name for a particular contractor under a particular stock number. If a different stock number is assigned for other logistics reasons the part number sequencing would start over with an "A".

7a. Field Name - Part Number (Trade Name, Synonyms)
b. Size -43
c. Type Characters - General
d. Mandatory - Yes
e. Definition - This is the name or number that the manufacturer uses to designate his product. The terms Part Number/Trade Name or Synonym are used interchangeably.

f. Special Instructions - If a contractor changes the chemical composition of his product but does not change the part number/trade name, the product wi 11 be differentiated in the data system by the addition of a date of manufacture as follows: FSCM 12345, Part No. ABC on or after 77180. The P/N and date of manufacture are both entered in the P/N data field. The date of manufacture is generally not on the MSDS so it may be necessary to contact the contractor and determine the point in time that the change was made. The date along with the P/N is entered on the Addendum Worksheet. When there is a change in the product without a change in the P/N the P/N indicator before the change in this case-77180, would be an "A" and the P/N indicator on or after 77180 would be "B". Thus the computer will retain the information as the P/N both be f ore and after the change.

For those cases where an item is bought according to a specification that specifies the exact chemical content, for either single or multiple component items, then the specification number can be entered in the part number field and the FSCM would be either 81348 for items bought under a Federal Specification/Standard; or 81349 for items bought under a Military Specification/Standard. It will not be necessary to have a separate entry for every contractor because the product would be exactly the same regardless of who supplied it. An excellent example would be items in the 6810 class which are straight chemicals. For items bought according to ACS specifications use FSCM 04059 and enter the name of the chemical in the P/N field if the contractor' s name and P/N is not otherwise known.

When the specification number is entered in this field, the type, grade, class, etc. should also be entered.

For those specifications where the exact chemical content is not specified it will be necessary to enter the FSCM and P/N for each different product made under the specification for that NSN because each may represent a different hazard.

8a. Field Name - Item Name
b. Size -48
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the cataloging item name as recorded in the Federal Cataloging System. It is established in the Total Item Record.
f. Special Instructions - This data element will be obtained by interrogating the DLSC records and automatically feeding the data into the file. The focal points are not required to complete this data element, but they can if so desired.

9.a. Field Name - Specification
b. Size - 20
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the basic specification or standard under which an item is bought. This data field is limited to only the basic number and does not include revision numbers, types, grades, etc.
f. Special Instructions - Since this is a data element which can be interrogated it must be expressed in exactly the same way each time because the computer must match for the element character by character. Only those numbers for Military Specifications, Military Standards, DoD Specifications, Federal Standards and Federal Specifications are allowed. The format is as follows:

DOCUMENT	METHOD OF EXPRESSION
Military Specification	MIL-X-ØØØØØ
Military Standards	MS ØØØØØ
DoD Specification	'ire-XØØØØØ
Federal Specification	XX-X-ØØ
Federal Standard	FED STD ØØØ

In the format above there is always a space or dash between the letters and numbers as shown. Where an "X" is shown is a letter and where a Ø is shown is a number in the actual specification and standard. Any type, grade or class associated with the particular specification or standard should be shown in the supplemental data field. If an industry specification or standard is used for procurement, it will be placed in supplemental data.

10. a. Field Name - Proprietary Indicator
b. Size - 3
c. Type Characters - Alpha
d. Mandatory - Yes
e. Definition - This is a YES or NO entry which indicates that a contractor considers his data to be proprietary and has so stated on the MSDS as covered in the applicable clause in the DAR.
f. Special Instructions - A "YES" will be entered only if a contractor has indicated that any data on his MSDS is proprietary. This data element' will be what the computer uses as the criteria for restricting certain data elements in the output. This restricted output will be used to fulfill. requests under the Freedom of Information Act . If the contractor has not restricted the data a "NO" shall be entered. The data field will not be left blank because the computer will not allow the NSN, FSCM, and P/N to be entered unless this field is completed.

11. a. Field Name - Item Manager
b. Size -3
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the Activity Code for the current item manager that is in the DLSC files.
f. Special Instructions - The focal points are not required to complete this data. It will be automatically fed into the data system when the DLSC files are interrogated.

12.a. Field Name - Net Propellant Weight for Ammunition
b. Size - 7
c, Type Characters - General
d. Mandatory - No
e. Definition - This is net weight of the propellant ingredient of an explosive. It is not to be confused with the Net Explosive Weight.
f. Special Instructions - The numbers will be expressed in whole numbers and units (i.e. 53 LB or 1563 KG).

13.a. Field Name - Storage Compatibility Code
b. Size - 5
c. Type Characters - General
d. Mandatory - No
e. Definition - The storage compatibility code is one of a number of codes which is assigned to an NSN, FSCM, P/N that categorizes it for storage purposes. The items are then stored in such a manner that compatible items are stored next to one another and incompatible items are separated by a specific space or firewall.
f. Special Instructions - This item will be entered only by the DLA focal point at this time. The coding structure, definitions, etc. , will be written in a DLA manual. It is intended that eventually the storage compatibility coding system will be presented to the DoD Community for adoption DoD wide.

14. a. Field Name - NRC License Number
b. Size - 15
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the number of the license granted by the Nuclear Regulatory Commission. It is given to the military agency that manages the item.

f. Special Instructions - The entire license number including prefix letters will be put in this data field.

15 .a. Field Name - Supplemental Data
b, Size - **192**
c. Type Characters - General
d. Mandatory - No
e. Definition - This data field will primarily contain hazardous component s over and above the five most hazardous. However, it can also contain any unique nonrepetitive data developed by the focal point which could affect personnel safety.
f. Special Instructions - Because this field can contain components of items that are proprietary it will be blanked out when the proprietary indicator is marked "YES". Thus any additional unique data that the focal point develops for these proprietary items should be placed in the other precautions data field of the MSDS. For nonproprietary items the additional focal point data can be placed in either the supplemental data field or the other precautions data field. The focal points are encouraged to be selective in the data that is input because of space limitations.

3.2.2.2 Material Safety Data Sheet

3.2.2.2.1 Characters Allowed. The following types of characters are allowed in each data field depending on the edit criteria:

Alpha Characters - Will accept A through Z or blank. All upper and lower case letters will be input as upper case letters only.

General Characters - Will accept any character, including blank, decimal, parenthesis, plus/minus signs etc. , as well as alpha and numeric characters.

Appendix A lists the characters that are acceptable in the system. Any non-approved characters on the MSDS must be changed by the focal point to the accepted characters.

Integer Characters - Will accept 0 through 9 only.

Numeric Characters - Will accept 0 through 9, special characters but will not accept alpha.

NOTE 1: For numbers less than 1.0, a 0 should be entered to the left of the decimal (i.e. 0.895 instead of .895). This is essential in the prevention of clerical errors.

NOTE 2: All data entries are to be left justified (i.e. begin all entries in the extreme left of the data field).

NOTE 3: Each of the data elements listed below contains 6 sections (a-f). Special attention should be drawn to the type of character allowed (section c), the Mandatory Requirement (section d) and Special Instructions (section f) because these sections contain the rules for data entry which, if not followed precisely, will cause data to be rejected from the system.

3.2.2.2.2 Detailed Listing of Data Elements. Below is a detailed listing of the data elements that appear on the Material Safety Data sheet. Mandatory data elements are so noted. The size of the field refers to both input and output and includes special characters such as minus signs or decimal points.

1.a. Field Name - Manufacturers Name
b. Size - 50
c. Type Characters - General
d. Mandatory - Yes
e. Definition - This is the name of the manufacturer of the product.
f. Special Instructions - This data field will include divisions etc., but will not include the address because this is covered by the FSCM. For specification items when a manufacturer is not known the phrase "BOUGHT ACCORDING TO SPEC" may be entered. For those cases where a distributor submits an MSDS prepared by a manufacturer, with the manufacturer!s name on it, the distributors name should be entered in the data field first followed by the manufacturer' s name in parentheses. This will highlight the distributor's name as he is the one who has the contract with the Government and whose name is most likely to appear on the packaging.

2a. Field Name - Emergency Telephone Number
b. Size - 19
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the telephone number to be called only in emergency situations when focal point personnel cannot be reached (i.e. during nonduty hours).
f. Special Instructions - This field will include the area code and the extension, if applicable. Use "X" as an abbreviation for extension (Example 716-4518000 X83583). Foreign telephone numbers may be included.

3a. Field Name - Chemical Name and Synonyms
b. Size - 25
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the chemical name of the item and applies only to products consisting of a single element or compound, such as oxygen, or methyl ethyl ketone. If the name exceeds the allowed space it should be placed in supplemental data.
f. Special Instructions - If it is necessary to refer to the supplemental data section write the abbreviation "SEE SUPP DATA" in the field.

4a. Field Name - Part Number (Trade Name/Synonyms).
b. Size - 43
c. Type Characters - General
d. Mandatory - Yes
e. Definition - This is the name or number that the manufacturer uses to designate his product. The terms Part Number, Trade Name or Synonyms are used interchangeably.
f. Special Instructions - For those cases where a specific contractor is not know-n such as for Federal or Military Specifications, the specification number, type, grade, class, etc. , would be entered here. It will be necessary to input data to this field because it is mandatory and the computer will reject the entire entry if this field is empty. The computer does not, however, look for any specific type of information or format in this, field. If no part number is known for a specification item the number of the specification can be put in this field. For those specifications

with types, grades, classes, etc., it is very important that they be included in this field because each represents a different item. There is no need for differentiation by date, as required on the Addendum Worksheet, because this date has been put on the Addendum Worksheet.

5a. Field Name - Chemical Family
b. Size -25
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the generic name of the chemical family of the item, such as “acid” or “ketone”.
f. Special Instructions - This field applies only to single elements and compounds.

6a. Field Name - Fo rmula
b. Size -20
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the chemical formula of the item.
f. *Special Instructions - This* field applies *only* to single elements or compounds, not to the formulation of a mixture. Subscripts in formulas will be preceded by an asterisk (*) because the computer cannot print numbers below the line. Example: C_2H_5 $COCH_3$ would be expressed as C*2H*5COCH*3.

7a. Field Name - NIOSH Code
b. Size - 9
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the accession number assigned to an individual chemical in the Registry of Toxic Effects of Chemical Substances which is published and maintained by the National Institute for Occupational Safety and Health.
f. Special Instructions - The focal point is responsible for determining the NIOSH code for the five most hazardous components listed on an MSDS. This code *is* the only code assigned to a particular chemical item and is cross-referenced to all′ different synonyms of′ the item. It is through this code that the computer will recall those NSN, FSCM, P/N′ s which contain the chemical. This technique is used rather than having the computer mat ch character by character for the entire name of the chemical. Oniy enough file space is alloted for the five most hazardous components and is believed to be sufficient to cover the vast majority of chemicals used by the DoD. It will be a matter of professional judgement on the part of the focal point personnel to determine which five components are the most hazardous. The largest percentage component may not be the most hazardous.

The NIOSH Code is to be written on the MSDS beside the chemical name of the component. Only the five most hazardous will have the NIOSH code beside them. The other less hazardous components should be entered in the supplemental data section of the Addendum Worksheet. All components which do not have a NIOSH code assigned or are not noted in the supplemental data section of the Addendum Worksheet will be ignored by the data input clerk. As noted in the section covering the supplemental data section, components over and above the five most hazardous, for proprietary items , should be included in the supplemental data field.

Occasionally, a NIOSH code will not have been assigned to a chemical. When a focal point discovers such an item, they should contact the DLA focal point and request that a code be assigned. This locally assigned code will consist of seven

numeric and two alpha characters (i.e. 14OOOOOCY). This is the opposite of the NIOSH format of two alpha and seven numeric. The DLA focal point will keep a log of the data bank assigned codes that supplement the NIOSH codes and periodically publish this for future references. Also, NIOSH will be requested to assign accession numbers to chemicals not currently assigned.

It is recognized that many chemicals contain five or less components and some of these are not normally considered hazardous (i.e. - water) but that it may be desirable to include these in the components section to show a total of 100 percent. For the se items it is permissible, but not mandatory, for nonhazardous components to be included. It may be necessary for the focal points to obtain a DLA assigned code. Since water is the most commonly used solvent and since it is not assigned a NIOSH code the following locally assigned code should be used for water: 1000000WA .

NOTE : If any one of the data elements in the hazardous components section of the MSDS is changed (i.e. the NIOSH code, the chemical name, percent and Threshold Limit Value (TLV) for any of the five most hazardous components) all of the data elements in the section, including those unchanged, must be reentered. This is necessary because the MSDS does not require the hazardous components to be entered in any particular order. Thus the computer would not be able to determine which of the five components was being changed.

8.a. Field Name - Chemical Name of Hazardous Component (Ingredient)
b. Size - 89
c. Type Characters - General
d. Mandatory - No
e. Definition - The standard, most commonly used chemical name of the item.
f. Special Instructions - Only those chemicals which have been given a NIOSH or data bank assigned number will be available for recall-. The chemical names of any components over and above the five most hazardous will be in the supplemental data section.

When an item is radioactive the chemical name of the radionuclide will be put in this field along with the NIOSH (data bank) code so that the hazardous constituents of radioactive materials can be shown.

NOTE : If any one of the data elements in the hazardous components section is changed (i.e. the NIOSH code, chemical name, percent and TLV for any of the five most hazardous components) all of the data elements, including those unchanged, must be reentered. This is necessary because the MSDS does not require the hazardous components to be entered in any particular order. Thus the computer would not be able to determine which of the five components was being changed.

9a. Field Name - Percent of Hazardous Component (Ingredient)
b. Size - **4**
c. Type Characters - General
d. Mandatory - No
e. Definition - The approximate percent age by weight of each hazardous component
f. Special Instructions - FED STD **313A** allows the contractor to submit an MSDS with the composition expressed as either weight percent or volume percent. For purposes of this data system the percentages are assumed to be by weight. If the

percentages are by volume the focal point should include the following phrase in the supplemental data section: "ITEM COMPOSITION IS IN PERCENT BY VOLUME?'. The focal points are encouraged to convert volume percentages into weight percentages.

FED STD 313A allows the contractor to state the concentrations as less than certain percentages. Indeed, many contractors may be only willing to state compositions this way because they consider the item to be proprietary. Accordingly when a percentage is expressed in this manner (i.e. Less than 5%, or <5%) the focal point should use the symbol "~" for less than and "~" for greater than. Thus the percent composition on the MSDS would be as given by this example: <5 or> 80. Only whole numbers will be used because the field is only four spaces long. When an exact concentration is given, it should be expressed with one decimal point (i.e. 89.5). The decimal point will occupy one of the four spaces in the data field. When 100 is entered the decimal point need not be shown. For those items where the percentage is not applicable (such as a radioisotope in a piece of hardware) enter "N/A".

NOTE : If any one of the data elements in the hazardous components section is changed (i.e. the NIOSH Code, chemical name, percent, and TLV for any of the five most hazardous components all of the. data elements, including those unchanged, must be reentered. This is necessary because the MSDS does not require the hazardous components to be entered in any particular order. Thus the computer would not be able to determine which of the five components was being changed.

10.a. Field Name - Threshold Limit Value (TLV)
b. Size - 15
c. Type Characters - General
d. Mandatory - No
e. Definition - The TLV is a guide based upon the best available information established by the American Conference of Governmental Hygenists for concentrations of airborne substances in workroom air. They include both time weighted averages based on conditions which are believed that workers may be repeatedly exposed to day after day without adverse e f feets. The TLVS also include short term ceiling concentrations for certain chemicals. The TLVS are intended to serve as guides for use by professional Industrial Hygienists in the control of health hazards, rather than definitive marks between safe and dangerous concentrations. This data field is for the individual components of the item rather than the entire mixture or compound.
f* Special Instructions - The data should be expressed in whole numbers and the units should be included in the field length. Because of computer limitations the units should be expressed as shown below:

(1) Millions of particles per cubic foot of air (mppcf) should be expressed as: MPPCF.
(2) Milligrams of particulate per cubic meter of air (mg/m^3) should be expressed as: MG/CUM.
(3) Micrograms of particulate per cubic meter' of air (ug/m^3) should be expressed as: UG/CUM.
(4) Parts per million parts of air by volume (ppm) should be expressed as: PPM.
(5) Fibers/cubic meter of air should be expressed as: F/CUM.
(6) Fibers/cubic centimeter of air should be expressed as: F/CC.

For ceiling or skin notation, the TLV should be preceded with a "C" or "S".

NOTE : If any one of the data elements in the hazardous components section is changed (i.e. the NIOSH code, chemical name, percent and TLV for any of the five most hazardous components) all of the data elements, including those unchanged, must be reentered. This is necessary because the MSDS does not require the hazardous components to be entered in any particular order. Thus the computer would not be able to determine which of the five components was being changed.

11.a. Field Name - Boiling Point
b. Size - 11
c. Type Characters - General
d. Mandatory - No
e. Definition - The temperature at which liquids boil at a pressure of 760 mmHg.
f. Special Instructions - FED STD 313A specifies that the contractor must express the boiling point in both degrees F and in degrees C. Thus enough space is alloted for both units. For degrees F place an "F" immediately following the number. For degrees C place a "C" immediately following the number. The temperature ex-pre ssion should be separated by a space with a comma in the space. If data consists o f a boiling point range put the range in degrees F in this field and include the range in degrees C in the supplemental data section. When the figure is below 0, in-clude minus sign. Data will be expressed in whole numbers.

12. a. Field Name - Vapor Pressure
b. Size - 3
c. Type Characters - Integer
d. Mandatory - No
e. Definition - The pressure (usually expressed in millimeters of mercury) characteristic at 68°F (20°C) of vapor in equilibrium with its liquid or solid form.
f. Special Instructions - The data will be expressed in whole numbers. The units are mmHg but are not included in the data field.

13. a. Field Name - Vapor Density
b. Size - 4
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - The relative density or weight of a vapor or gas (with no air present) compared with an equal volume of air.
f. Special Instructions - FED STD 313A states that the vapor density is to be given for the ambient temperature range of 60-90°F (16-32°C). The data element will contain one whole number and two decimal places (Example: 1.15). The decimal point occupies one position of the field.

14. a. Field Name - Solubilit y in Water
b. Size -11
c. Type Characters - General
d. Mandatory - No
e. Definition - The ability or tendency of one substance to blend uniformly with another (in this case, water). In FED STD 313A the following terms are used to describe the solubilit y of the product by weight in distilled water at 50 degrees F (10 degrees C):

Negligible	Less than 0.1 percent
Slight	0.1 - 1 percent
Mode rate	1 - 10 percent
Appreciable	More than 10 percent
Complete	In all proportions

The above words can be ‘used to express volubility or it can be expressed numerically. Decimal place occupies one position of the data field.

15. a. Field Name - Specific Gravity
b. Size - 6
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - The ratio of the weight of a volume of material to the weight of an equal volume of water at 68°’ (20°C). This determines whether the material floats or sinks in water.
f. Special Instructions - The data element consists of one whole number and four decimal places (Example: 1.0132). The decimal point occupies one posit ion cf the data field.

16. a. Field Name - Percent Volatile by Volume.
b. Size - 4
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - The percentage of the liquid or solid by volume that evaporates at the ambient temperature of 70° F (21.1° C). This applies to solids such as naphthalene. Specifically the vapor pressure of a component divided by its mole fraction in the liquid or solid state.
f. Special Instructions - Data will be expressed with one decimal point (i.e. 30.1). When 100 is entered, the decimal need not be shown.

17. a. Field Name - Evaporation Rate per Reference
b. Size - 18
c. Type Characters - General
d. Mandatory - No
e. Definition - The ratio of the evaporation rate of the material to that of either Butyl Acetate or Diethyl Ether.
f. Special Instructions - The data should have no more than two decimal places. The referenced chemical should also be included in this field.

18. a. Field Name - Appearance and Odor
b. Size - 50
c. Type Characters - General
d. Mandatory - No
e. Definition - This is a description of the physical state of the material and any characteristic odor.
f. Special Instructions - A brief description should be given as to whether the materials are viscous, colorless, liquid with aromatic odor etc.

19. a. Field Name - Flash Point
b. Size - 16
c. Type Characters - General
d. Mandatory - No
e. Definition - The temperature in degrees F and in degrees C at which a liquid will give off enough flammable vapor to ignite when a spark or flame is applied.

f. Special Instructions - FED STD 313A specifies that the flash point will be expressed in both degrees F and in degrees C. Degrees F will be written first. When the figure is below 0, include the minus sign. If data consists of a range, put the flash point range in degrees F in the field and put the range in degrees C in the supplemental data field. Data will be expressed in whole numbers. An abbreviation for the test method will be included. Below is a list of the methods and the abbreviation to be used:

Tag Closed Cup - TCC
Pensky Martens Closed Cup - PMCC
Sets flash Closed Cup - SCC
Tag Open Cup - TOC
Cleveland Open Cup - COC
Closed Cup (method not specified) - CC
Open Cup (method not specified) - OC

Every possible effort should be made to obtain flash point data te steal by either the TCC or PMCC method since these are the most universally used methods and certain federal agencies cite these methods in their regulations.

This flash point is entered from the MSDS. There is also a flash point field on the TDS. If a flash point is entered from the MSDS but not from the TDS the computer will of course print the MSDS flash point. If a flash point is entered from the TDS but not from the MSDS the computer will of course print the TDS flash point. But, if the flash point is entered from both the MSDS and the TDS the computer will only print the MSDS flash point in the output. The reason for this is because the MSDS is the formal vehicle for obtaining data from the contractor and is considered more reliable. When the focal point is reviewing the MSDS and developing the TDS, great care should be taken to assure that the two flash points agree.

20. a. Field Name - Lower Explosive Limit (LEL)
b. Size - 4
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - The lower range of gas or vapor concentrations (percent by volume in air) at which the gas or vapor will burn or explode if an ignition source is present. Knowledge of the LEL will aid in determining the volume of ventilation needed for an enclosed space to prevent fires and explosions.
f. Special Instructions - Data should have no more than one decimal place. The decimal point occupies one space in the data field. For multiple sets of limits, include a note in the supplemental data to this ef fe ct.

21. a. Field Name - Upper Explosive Limit (UEL)
b. Size - 4
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - The upper range of gas or vapor concentrations (percent by volume in air) at which the gas or vapor will burn or explode if an ignition source is present.
f. Special Instructions - Data should have no more than one decimal point. The decimal point occupies one space in the data field. For multiple sets of limits, include a note in the supplemental data to this effect.

22a. Field Name - Extinguishing Media
b. Size - 60
c. Type Characters -General
d. Mandatory - No
e. Definition - This is a list of the fire fighting media suitable for use on the burning material. For certain specific chemicals, special formulations, in addition to the standard agents, are available for extinguishing fires. The se should be indicated by generic name. The standard 'fire fight ing agents are : Water fog, foam, alcohol foam, and dry chemical.

23a. Field Name - Special Fire Fighting Procedures
b. Size - 60
c. Type Characters - General
d. Mandatory - No
e. Definition - This field should state if water is unsuitable and should specify the fire fighting media to be used. Also the field should list any necessary personal protective equipment.
f. Special Instructions - None

24.a. Field Name - Unusual Fire and Explosion Hazards
. b. Size - 100
c. Type Characters - General
d. Mandatory - No
e. Definition - This field specifies any unusual fire and explosion hazards and special conditions that govern them.
f. Special Instructions - None

25 .a. Field Name - Threshold Limit Value (TLV) for the Mixture.
b. Size - 15
c. Type Characters - General
d. Mandatory - No
e. Definition - The TLV is a guide based upon the best available information established by the American Conference of Governmental Industrial Hygenists for concentration of airborne substances in workroom air. They include both time weighted averages based on conditions which are believed that workers may be repeatedly exposed to day after day without adverse effects. The TLVS also include short term ceiling concentrations for certain chemicals. The TLV values are intended to serve as guides for use by professional Industrial Hygenists in the cent rol of health hazards, rat her than definitive marks bet we en safe and dangerous concentrations.
f. Special Instructions - The data should be expressed in whole numbers and the units should be included in the field length. Because of computer limitations the units should be expressed as shown below:

(1) Millions of particles per cubic foot of air (MPPCF) should be expressed as: MPPCF.
(2) Milligrams of particulate per cubic meter of air (Mg/m^3) should be expressed as: MG/CUM .
(3) Micrograms of particulate per cubic meter of air (ug/m^3) should be expressed as: UG/CUM.
(4) Parts Per million parts of air by volume (pPM) should be expressed as: PPM.
(5) Fibers/cubic meter of air should be expressed as: F/CUM.
(6) Fibers/cubic centimeter of air should be expressed as: F/CC.

For ceiling or skin notation, the TLV should be preceded with a "C" or "S".

26a. Field Name - Effects of Overexposure
b. Size - 100
c. Type Characters - General
d. Mandatory - No
e. Definition - The mó st common sensations that the exposed person will feel, and their appearance.
f. Special Instructions - None

27a. Field Name - Emergency and First Aid Procedures
b. Size - 250
c. Type Characters - General
d. Mandatory - No
e. De finit ion - The se procedures describe what emergency and first aid procedures to be used in the event of inhalation, skin or eye contact, and oral ingestion. The victim should be examined by a doctor as soon as possible after exposure.
f. Special Instructions - None

28a. Field Name - Stability
b. Size - 3
c. Type Characters - Alpha
d. Mandatory - No
e. Definition - This field indicates if the material is stable or “unstable under reasonably foreseeable conditions of storage, use or misuse.
f. Special Instructions - This is a “YES” or “NO” entry. If the block for "Stable" is checked the input will. be entered “YES”. If the “Unstable” block is checked the input will be “NO”. A check or cross beside the “stable” or “unstable” blocks will be considered an acceptable submittal from the focal points to the data bank.

29a. Field Name - Conditions to Avoid (because of instability y).
b. Size - 60
c. Type Characters - General
d. Mandatory - No
e. Definition - This field tells what type of conditions may cause a dangerous reaction (Example - shock from dropping, temperature above 150 degrees F, etc.).
f. Special Instructions – None

30. a. Field Name - Incompatibility (materials to avoid)
b. Size - 60
c. Type Characters - General
d. Mandatory - No
e. Definition - This field includes information on such common materials and contaminates with which the product may reasonably come into contact, to produce a reaction which would release large amounts of energy and create hazardous conditions.
f. Special Instructions – If such materials do not exist or if they are unknown, it should be stated. It should be stated whether the material is an oxidizing material, acid, caustic alkali or corrosive. Identify container materials that will react with material that is being used and if this is the case the container must not be used.

This data element should not be confused with the storage compatibility code which is entered on the Addendum Worksheet.

31. a. Field Name - Hazardous Decomposition Products
b. Size - 60
c. Type Characters - General
d. Mandatory - No
e. Definition - These are the hazardous materials that are produced in dangerous amounts by burning, oxidation, or by heating in welding. Thermal decomposit ion products such as CO, $C0_2$ and hydrochloric acid from vinyl chloride plastics are examples.
f. Special Instructions - None

32a. Field Name - Hazardous Polymerization Occur
b. Size - 3
c. Type Characters - Alpha
d. Mandatory - No
e. Definition - That reaction which takes place in which polymers are formed at such a rate that large amounts of energy are released.
f. Special Instructions - This is a "YES" or "NO" entry. If the block for "may occur" is checked the clerk will enter "YES". If the "will not occur" block is checked the clerk will enter "NO". A check or cross beside either of the two blocks on the MSDS will be an acceptable submittal from the focal points to the data bank.

330a. Field' Name - Conditions to Avoid (because of hazardous polymerization)
b. Size - **60**
c. Type Characters - General
d. Mandatory - No
e. Definition - This field lists those reasonably foreseeable storage conditions which would start polymerization. The expected time period in which the inhibitors may be used up should be included.
f. Special Instructions - None

34a. Field Name - Spill and Leak Control
b. Size - **250**
c. Type Characters - General
d. Mandatory - No
e. Definition - This field addresses what should be done on an emergency basis to control the spill or leak. The se procedures could include any applicable precautions for the avoidance of breathing gases and vapors; contact with liquids and solids, removing sources of ignition, and special equipment and personnel protective equipment required for cleaning up, such as glass or plastic scoops and respiratory devices.
f. Special Instructions - Data in this field can be either contractor or focal point generated.

35a. Field Name - Waste Elimination (Waste Disposal Method)
b. Size - 250
c. Type Characters - General
d. Mandatory - No
e. Def init ion-This field addre sses what should be done with the material that was used to control the spill or leak and has become contaminated. It is not long range disposal methods or procedures which will be addressed in the Disposal Sect ion.

f. Special Instructions - This sect ion can be used to describe how the contaminated waste could be packaged and containerized to await ultimate disposal. Data in this field can be either contractor or focal point generated.

36a. Field Name - Respiratory Protection
b. Size - 68
c. Type Characters - General
d. Mandatory - No
e. Definition - Refers to the personal protective equipment used to protect the wearer from inhalation of contaminated atmosphere. Examples are chemical cartridge respirators, dust respirators, etc.
f. Special Instructions - Data in this field can be either contractor or focal point generated.

37a. Field Name - Ventilation
b. Size - **60**
c. Type Characters - General
d. Mandatory - No
e. Definition - The basic ventilation methods are local exhaust ventilation and dilution or general ventilation. Dilution or general ventilation consists of general ventilation of a workroom so designed that the contaminants released into the atmosphere are continuously diluted by the introduction of uncontaminated air to levels which a worker can safely be exposed for 8 hours a day. It is usually applied to the control of low toxicity contaminants. A local exhaust system is used to carry off an air contaminant by trapping it near its source.
f. Special Instructions - The MSDS lists four blocks, any of which may be filled in. For this one data element the clerk will input the heading as well as the data beside it. When only a check or cross is put in the block indicating the type of ventilation that applies the clerk will put a “YES” beside the heading that was entered. Data in this field can be either contractor or focal point generated.

38a. Field Name - Protect ive Gloves
b. Size - 15
c. Type Characters - General
d. Mandatory - No
e. Definition - The se are gloves that are used to protect personnel against the handling of corrosive and/or toxic materials such as acids or other hazardous materials that can leave a deteriorating effect on the human skin tissue by skin absorption. The material of the gloves must be carefully considered as not all rubber or plastic used in gloves are suitable to the exposure from the specific chemical which may be encountered.
f. Special Instructions - None

39a. Field Name - Eye Protection
b. Size - **25**
c. Type Characters - General
d. Mandatory - No
e. Definition - The eye protection equipment is used for the protection of the eyes against acid splashes, chipping, welding, and other eye-hazard jobs. Examples include industrial safety glasses, chemical goggles, full face shields, etc.
f. Special Instructions - Data in this field can be either contractor or focal point generated.

40. a. Field Name - Other Protective Equipment
b. Size - 60
c. Type Characters - General
d. Mandatory - No
e. Definition - This is additional equipment that is worn by the worker to prevent exposure or contact with hazardous chemicals. Examples include suits or boots made of natural rubber, neoprene, or vinyl; safety shoes, ear protection and hard hats.
f. Special Instructions - Data in this field can be either contractor or focal point generated.

41.a. Field Name - Handling and Storage Precautions
b. Size - 150
c. Type Characters - General
d. Mandatory - No
e. Definition - This field includes any special precautions to be taken in storage and handling to avoid reaction hazards.
f. Special Instructions - When applicable, an indication of safe storage life of the product in relation to reactivity should be made. Other general precautions to be taken should also be included. Also, this section can identify any equipment or special containers, such as DOT Specification containers, that are required for transfer and storage. Data in this field can be either contractor or focal point generated.

42.a. Field Name - Other Precautions
b. Size - 192
c. Type Characters - General
d. Mandatory - No
e. Definition - This section includes any unique additional precautions that must be taken for any specific item.
f. Special Instructions - None

3.2.2.2.3 Additions, Changes and Deletions. As previously stated in section 3.2.2. 1.B(2) (f) it will be the responsibility of the focal point to identify whether data submitted is an add, change or delete and to indicate on the MSDS as follows:

a. ADD - The addition of a new MSDS or TDS to the file.
ACTION - No special annotation is required on the form.

b. CHANGE - The addition, change or deletion of individual data elements to an NSN, FSCM and P/N indicator already in the system file.
ACTION - Mark “CHANGE” at the top of the MSDS. On the Addendum Worksheet, place an "X" in the block that represents the section of the MSDS in which the change was made. Other data elements on the MSDS not affected by the change will be ignored. If a specific field is to be blanked out without reentering other data in that field, input 5 question marks (?). If the field is less than 5 spaces, fill the field with question marks.

c. DELETE - The deletion of a particular NSN, FSCM and P/N Indicator currently in the system file.
ACTION - The action code will be marked " D“ on the Addendum Worksheet. It will not be nece ssary to submit an MSDS with the Addendum Worksheet.

NOTE : When the Addendum Worksheet is submitted with a " D" , only the data in the Safety Data File will be deleted. When this data is deleted, all. the safety

data elements except the mandatory ones will be deleted from the output and the following phrase will appear in the Supplemental Data Field: 'THIS ITEM DELETED BECAUSE OF ERRONEOUS DATA'!.

The above action will not affect the data elements in the Transportation Data File. Both the Addendum Worksheet and the Transportation Data Sheet must be annotated with a "D" to delete all data elements.

When all data elements are deleted, the mandatory data elements will still appear on the cumulative quarterly updates until the next annual publication.

3.2.2.3 Transportation Data Sheet (TDS).

3.2.2.3.1 Characters Allowed. The following types of characters are allowed in each data field depending on the edit criteria:

Alpha Characters - Will accept A through Z or blank. All. upper and lower case letters will be input as upper case letters only.

General Characters - Will accept any character, including blank, decimal, parenthesis, plus/minus signs etc., as well as alpha arid "numeric characters. Appendix A lists the characters that are acceptable in the system. Any nonapproved characters on the MSDS must be changed by the focal point to the acceptable characters.

Integer Characters - Will accept O through 9 only.

Numeric Characters - Will accept O through 9, special characters but will not accept alpha.

NOTE 1: For numbers less than 1.0, a O should be entered to the left of the decimal (i.e. 0.895 instead of .895). This is essential. in the prevention of clerical. errors.

NOTE 2: All data entries are to be left justified (i.e. begin all entries in the extreme left of the data field).

NOTE 3: Each of the data elements listed below contain 6 sections '(a - f). Special attention should be drawn to the Type of Character allowed (section c), the Mandatory Requirement (section d) and Special Instructions (section f) because these sect ions contain the rules for data entry which, if not fallowed precisely, will cause data to be rejected from the system.

3.2. 2.3.2 Detailed Listing of Data Elements. Below is a detailed listing of the data elements that appear in the Transportation Data Sheet. Mandatory data elements are so noted. The size of the field refers to both input and output and includes special characters such as minus signs or decimal points.

la. Field Name - Date
b. Size - 5
c. Type Character - Integer
d. Mandatory - Yes
e. Definition - This is the date that the focal point reviews the data and inputs it to the system. It is used to determine the general age of the data in the data bank.

f. Special Instructions - the julian date format is used - Example 78191.

2a. Field Name - Action Code
b. Size - 1
c. Type Characters - Alpha
d. Mandatory - Yes
e. Definition - This is a l-position code to indicate whether the data is an add, change or delete.
f. Special Instructions - It will be the responsibility of the focal point to identify whether data submitted is an add, change or delete to this file. The late st output product should be reviewed before assigning the code.

The three actions and the codes are defined and may be accomplished as follows :

ADD - The addition of a new MSDS or TDS to the file. Mark " A" for add in the blank for action code.

CHANGE - The addition, change or deletion of individual data elements to a NSN, FSCM or P/N Indicator already in the system file. Mark "CHANGE" at the top of the TDS. Only those data elements being changed in the Transportation Data File plus the mandatory data elements need to be completed. The others are left blank. If it is necessary to blank out an individual field five question marks (?) should be input in the field. For fields shorter than 5 spaces the entire field should be filled with question marks.

DELETE - The deletion of NSN, FSCM, and part number indicator currently in file. Mark " D" (for delete) in the blank for the action code on the TDS. An item should be deleted from the list only when the focal point determines that the item is not now nor has ever been hazardous and was in the list originally because of erroneous data. An item should not be removed from the list because it was once bought as hazardous but is no longer bought that way due to a change in formulation or is no longer an active item. Inactive or old items eventually require disposal and the hazardous properties must be known at that time. No MSDS will be submitted for deletion actions. For a change in formulation where an item was hazardous by a previous formulation, the MSDS on the old item should be changed in the part number/ trade name field to indicate that item was hazardous when made prior to a specified date, and a second entry made to indicate the item *is* no longer hazardous. This would be a change action.

3a. Field Name - Focal Point Indicator
b. Size - 1
c. Type Characters - Alpha
d. Mandatory - Yes
e. Definition - This is the one-position alpha code indicating the focal point responsible for the input.
f. Special Instructions - Only one focal point indicator is allowed per one NSN, FSCM, P/N indicator. The computer will reject duplicate NSNS, FSCMs and P/N indicators for different focal point indicators. If the above situation occurs, the focal points involved should reach an agreement as to which one has responsibility for inputting the data. The focal point of the managing service should input the data.

The following are the only focal point indicator codes authorized for input to the system:

A - Army
D - Defense Logistics Agency
F - Air Force
G - General Services Administration
M - Marine Corps
N - Navy
P - Defense Mapping Agency
S - National Security Agency

NOTE 1: In the unique case where the Navy is inputting the data for the Marine Corps, the Navy Focal Point should use an "M" for Marine Corps managed items.

NOTE 2: If a service/agency is not listed as a focal point, that organization should request assignment of a focal point code from DGSC.

4.a. Field Name - NSN/Local Stock Number (ACN-Activity Control Number).
b. Size - 13
c. Type Characters - Integer and General (The first six characters are integers only and the last seven can be both alpha and integer - to accommodate Local Stock Numbers, ACNS, and stock numbers arbitrarily assigned by the focal points in order to input items into the system which do not have NSNS, LSNS or ACNS assigned to them).
d. Mandatory - Yes
e. Definition - This field can consist of three types of numbers. They are (1) the National Stock Number (NSN), (2) the Local Stock Number/Activity Cent rol Number (LSN/ACN), or (3) the Focal Point assigned Stock Number. This last category applies when an item is not assigned an NSN *or an* LSN/ACN but is hazardous and the decision is made to input the data to the system. The se types of items are normally bought by part number only.
f. Special Instruct ions - The following applies when there is a need for a focal point assigned stock number as described in the definition above: Since the program requires three elements for input (NSN(LSN/ACN), FSCM and Part Number Indicator) and since the FSCM and P/N indicator are obtainable it will be the responsibility of the focal point to assign a stock number in order to input the data to the system. To accomplish this the focal point will develop a 13 position number that has the focal point indicator as the seventh position of the stock number (Example - a number assigned by DLA might be 1111-00-D12-3456; a number assigned by the Air Force might be 1000-00-F44-1111) . The other 12 characters in the field would be chosen at the discretion of the focal point. However care should be taken not to duplicate your own numbers. A sequential numbering system is recommended. With the focal point indicator as the seventh position of this number there would be no chance of two focal points duplicating one another. Remember,. this situation occurs when there is not an NSN or LSN/ACN already assigned to an item.

For Nationally Stock Numbered items the computer will edit the first four positions of the NSN, which is the Federal Supply Class (FSC) against the approved FSCS in Cataloging Handbook H2-1. The 5th and 6th positions will be edited against the approved country codes in DoD 4100.39-M , Appendix 3-D-1. 15, National Codif icat ion Bureau Code Table. Thus care should be taken to ensure that the Country Code is correct. This edit will only apply to NSNs. It will not apply to LSNs/ACNs or Focal

Point assigned Stock Numbers.

The data system is designed to accept local stock numbers. However, a focal point may, as a matter of policy, elect not to include these stock numbers if it is decided that their inclusion would not be useful.

5.a. Field Name - Federal Supply Code for Manuf acturers/Nonmanuf ac t urers (FSCM/FSCNM).
b. Size - 5
c. Type Characters - General (Consists of either alpha or integer in the first two spaces and integer in the last three).
d. Mandatory - Yes
e. Definition - This is the Federal Supply Code for manufacturers/non-manufacture rs. It is a unique code assigned to any contractor who does business with the Government. For manufacturers it is generally all integers (i.e. 19139) whereas distributors generally have an alpha in the first or second position (i.e. 4A253).
f. Special Instructions - The procuring activity is responsible for assuring that the FSCM is annotated on the MSDS but the focal points can also determine the number if necessary. For certain items such as those bought by Federal or Military Specifications or Standards the contractor may not be known when certain data elements are initially developed for input to the system. For the se it is permissible to use the *general* FSCM assigned to specif icat ions developed by the General Services Administration or the Department of Defense. For specs developed by GSA the FSCM is 81348 and for DoD Specs the FSCM is 81349. Other such general FSCMS, such as those Purchase Descriptions developed by a specific Government activity or those assigned to industry or trade associations (i.e. American Chemical Society) are listed in the Name to Code Section of the FSCM publication (Cataloging Handbook H-8). By assigning these general codes it will be possible to retain data in the system when a specific manufacturer is not known or the item has not been bought.

For those cases where a distributor submits an MSDS prepared by a manufacturer, the distributor' s FSCM code should be used.

6a. Field Name - Part Number Indicator
b. Size - 1
c. Type Characters - Alpha
d. Mandatory - Yes
e. Definition - This is a one-position code developed to facilitate program processing by eliminating the neces sit y for mat thing part numbers position by position.
f. Special Instruction - The code must be input by the focal point for each part number or trade name submitted and will be used to differentiate part numbers for each contractor. The first part number/t rade name for a particular contractor will be coded A; the second part number for that same contractor under the same stock number will be B; etc. The only time any letter other than an "A" would be used is when there is more than one part number/trade name for a particular contractor under a particular stock number. If a different stock number is assigned for other logistics reasons the part number sequencing would start over with an "A".

7a. Field Name - Part Number (Trade Name, Synonyms)
b. Size -43
c. Type Characters - General
d. Mandatory - Yes
e. Definition - This is the name or number that the manufacturer uses to designate his product. The terms Part Number/Trade Name or Synonym are used inter-changeably.

f. Special Instructions - If a contractor changes the chemical composition of his product but does not change the part number/t rade name, the product will be differentiated in the data system by the addition of a date of manufacture as follows: FSCM 12345, Part No. ABC before 771$0. FSCM 12345, Part No. ABC on or after 77180. The P/N and date of manufacture are both entered in the P/N data field. The date of manufacture is generally not on the MSDS so it may be necessary to contact the contractor and determine the point in time that the change was made. The date along with the P/N is entered on the Addendum Worksheet. When there is a change in the product without a change in the P/N the P/N indicator before the change in this case 77180 would be an "A" and the P/N indicator on or after 77180 would be "B". Thus the computer will retain the information as the P/N both before and after the change.

For those cases where an item is bought according to a specification that specifies the exact chemical content, for either single or multiple "component items, then the specification number can be entered in the part number field and the FSCM would be either $1348 for items bought under a Federal Specification/Standard; or 81349 for items bought under a Military Specification/Standard. It will not be necessary to have a separate entry for every cent ractor because the product would be exactly the same regardless of who supplied it. An excellent example would be items in the 6810 class which are straight chemicals. For items bought according to ACS specifications use FSCM 04059 and enter the name of the chemical in the P/N field if the contractor's name and P/N is not otherwise known.

When the specification number is entered in this field, the type, grade, class etc should also be entered.

For those specifications where the exact chemical content is not specified it will be necessary to enter the FSCM and P/N for each different product made under the specification for that NSN because each may represent a different hazard.

8.a. Field Name - Unit of Issue (UI).
b. Size - 2
c. Type Character - Alpha
d. Mandatory - No
e. Definition - The standard unit of issue abbreviation from the DLSC Cataloging System (DoD 41 OO.39-M, Vol 10, Chapter 4, Table 53).
f. Special Instructions - The focal points are not required to enter data in this field because it will be automatically entered when an interface is established with DIDS. However, if the focal point wishes to enter the data in this field the abbreviations are listed in the Table in Appendix B.

9a. Field Name - Unit of Issue Container Quantity.
b. Size - **13**
c. Type Characters - General
d. Mandatory - No
e. Definition - The quantitative express ion for nondef initive units of issue (Example: 5 gal, 55 gal, 100 lb.)
f. Special Instructions - The focal points are not required to enter data in this field because it will be automat ically entered when an interface is established with DIDS. However, the focal point may enter the data in this field, if desirable. Units should be included in the field.

10.a. Field Name - Type of Container
b. Size - 13
c. Type Characters - General
d. Mandatory - No
e. Definition - The material of construction of the container (Example: metal, polyethylene).
f. Special Instruct ions - The applicable Military Specification Number or DOT Specification container may also be put ‘in this field.

11. a. Field Name - Net Unit Weight
b. Size - 11
c. Type Characters - General
d. Mandatory - No
e. Definition - The net weight of the hazardous material in the cent airier (Example: 450 lbs, 100 Kg). Units should be included in the data field.
f. Special Instructions - If the item consists of two or more packages each containing hazardous material, enter “IN ADD DATA” in this field and enter the weight of each material in the Additional Data Field (Item 45 of this paragraph).

12. a. Field Name - Flash Point
b. Size - 16
c. Type Characters - General
d. Mandatory - No
e. Definition - The minimum temperature in degrees F and in degrees C at which a substance gives off flammable vapors which in contact with spark or flame will ignite.
f. Special Instructions - FED STD 313A specifies that the flash point will be expressed in both degrees F and in degrees C. Degrees F will be written first. When the figure is below O, include the minus sign. If data consists of a range, put the flash point range in degrees F in the field and put the range in degrees C in the supplemental data field. Data will be expressed in whole numbers. An abbreviation for the test method will be included. Below is a list of the methods and the abbreviations to be used:

Tag Closed Cup - TCC
Pen sky Martens Closed Cup - PMCC
Setaflash Closed Cup - SCC
Tag Open Cup - TOC
Cleveland Open Cup - COC
Closed Cup (method not specified) - CC
Open Cup (method not specified) - OC

Every possible e f fort should be made to obtain flash point data tested by either the TCC or PMCC method since these are the most universally used methods and certain Federal Agencies cite these methods in their regulations.

This flash point is entered from the TDS. There is also a flash point field on the MSDS. If a flash point is entered from the MSDS but not from the TDS the computer will of course print the MSDS flash point. If a flash point is entered from the TDS but not from the MSDS the computer will of course print the TDS flash point. But, if the flash point is entered from both the MSDS and the TDS the computer will only print the MSDS flash point in the output. The reason for this is because the MSDS is the formal vehicle for obtaining data from the contractor and is considered more reliable. When the focal point is retie wing the MSDS and developing the TDS, great care should be taken to assure that the two flash points agree.

13.a. Field Name - Magnetism
b. Size - 5
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - A material with a magnetic field strength of 0.002 gauss or more at a distance of 7 ft, from any point on the package surface, or is of such mass that it could affect aircraft instruments.
f. Special Instructions - Units are milligauss. The units are not part of the data field. If units are in other than milligauss, they must be converted.

14.a. Field Name - DoT Exemption Number/DoD Certification of Equivalency.
b. Size - 12
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the number of the exemption granted by DoT or the number of the certificate of equivalency issued by DoD under the authority given in 49 CFR 173.7a.
f. Special Instructions - None

15. a. Field Name - Aerosol Propellant
b. Size - 108
c. Type Characters - General
d. Mandatory - No
e. Definition - The chemical name of the material which cause the contents of aerosol containers to be expelled (i.e. dichlorodifluoromethane).
f. Special Instructions - In addition to entering this chemical in the aerosol propellant field, enter it in the hazardous components section with a NIOSH Code if it is considered to be a hazardous material.

16. a. Field Name - Radioactivity
b. Size - 12
c. Type Characters - General
d. Mandatory - No
e. Definition - This data field applies to any material or combination of materials, which spontaneously emits ionizing radiation. The specific activity must be greater than 0.002 microcuries per gram.
f. Special Instructions - The units will be included in the data field. The abbreviations for the units are as f ollows:

CI - Curies
MCI - Millicuries
UCI - Micro curies

The decimal point will be included and occupies one position of the data field. If this field is changed, the field for "FORM" (No. 17) must be input again.

17.a. Field Name - Form
b. Size - 8
c. Type Characters - Gene ral
d. Mandatory - No
e. De finit ion - This field indicates if the radioactive material is in a normal form as defined in 49 CFR 173.389(d) or in Special form as defined in 49 CFR 173.389(g). The field also indicates if the material is in a solid, liquid or gaseous state.

f. Special Instructions - This field will be completed only if field 16 (Radioactivity) is completed. The field will include the abbreviation for normal or special form and the abbreviation for the physical state. The following are the abbreviations:

Normal - NORM
Special - SPEC
Solid - SOL
Liquid - LIQ
Gaseous - GAS

The following are the only authorized entries in the field:

NORM-SOL
NORM-LIQ
NORM-GAS
SPEC-SOL
SPEC-LIQ
SPEC-GAS

If this field is changed then the field for Radioactivity (No. 16) must be input again.

18. a. Field Name - Transport Group
b. Size - 3
c. Type Characters - General
d. Mandatory - No
e. Definition- This is the transport group assigned to a specific radionuclide in 49 CFR 173.390(a).
f. Special Instructions - The data is expressed in Roman Numerals and will range from I to VII. These consist of alpha "I' s" and "V' s". This field will be completed only when the form as shown in field 17, is Normal. For radionuclides in Special Form, input "N/A" for Not Applicable.

19. a. Field Name - Auto Ignition Temperature
b. Size - 6
c. Type Characters - General
d. Mandatory - No
e. Definition - The minimum temperature required to initiate or cause self-sustained combustion in any substance in the absence of a spark or flame.
f. Special Instructions - The data will be in whole numbers and an "F' or "C" for the units will be included.

20. a. Field Name - Viscosity
b. Size - 13
c. Type Characters - General
d. Mandatory - No
e. Definition - The internal resistance to flow exhibited by a fluid.
f. Special Instructions - The data will be in whole numbers and will include the units and the temperature at which the data applies. The' abbreviations are "CP" for Centipoise, "P" for poise, and " SUS" for Saybolt Universal Seconds. The temperature units will be expressed as an "F' or "C" immediately after the temperature.

21.a. Field Name - Net Explosive Weight
b. Size - 7
c. Type Characters - General
d. Mandatory - No
e. Definition - The total weight of all active explosive Class A & B components of an explosive which includes primary explosives, secondary explosives, pyrotechnics, and propellants.
f. Special Instructions - The data should be expressed in whole numbers with the units (i.e. 50 LB, 10 KG).

22a. Field Name - Coast Guard Ammunition Code
b. Size - 3
c. Type Characters - General
d. Mandatory - No
e. Definition - This is a three-position code consisting of two numeric and one alpha which is used to describe and classify military explosives so that they can be stowed aboard ship in a safe and compatible manner. The codes are described in 46 CFR 146.29-100.
f. Special Instructions - For purposes of the Data System the numeric characters will be input as Arabic rather than Roman Numerals to conserve field space.

23a. Field Name - DoT Shipping Name.
b. Size - 100
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the proper shipping name for shipments referenced * in 49 CFR 172.101.
f. Special Instructions - Input “N/A” for not applicable if the item is not regulated by this mode. When data is entered in this field, it will not be abbreviated.

24a. Field Name - DoT Class
b. Size - 23
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the hazard class for shipments referenced in * 49 CFR 172.101.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field, it will not be abbreviated. The following list of classes are the only authorized data elements in the data field. When an item has more than one hazard, enter MULTIPLE HAZARDS and then list the hazard classes in the Additional Data field. They must be entered exactly this way so that the field can be recalled: *

RADIOACTIVE MATERIAL
POISON A
FLAMMABLE GAS
NON FLAMMABLE GAS
FLAMMABLE LIQUID
OXIDIZER
“FLAMMABLE SOLID
CORROSIVE MATERIAL
POISON B
IRRITATING MATERIAL
COMBUSTIBLE LIQUID

ORM-A
ORM-B
ORM-C
ORM-D
* ORM-E
* MULTIPLE HAZARDS
CLASS A EXPLOSIVE
CLASS B EXPLOSIVE
CLASS C EXPLOSIVE
ORGANIC PEROXIDE
ETIOLOGIC AGENT
BLASTING AGENT

25a. Field Name - DoT Label
b. Size - *25*
c. Type Characters - General
d. Mandatory – No
e. Definition - This is the label specified in 49 CFR 172.101.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. Data in this field will not be abbreviated. If an item does not require a label because it is not regulated or the regulation specifically does not require one, enter “NONE”. If an item is a limited quantity and does not require a label for surface, but does require one for air, enter “NONE - LTD QTY". This one time abbreviation is allowed.

* 26a. Field Name - Mode Indicator
b. Size - 3
c. Type Characters - General
d. Definition - This field consists of the same symbols that are in column 1 of 49 CFR 172.101. These symbols indicate the mode of shipment under which the item is regulated.
e. Input an “A”, “W”, “E” or "+" as appropriate. Leave blank if the field does not apply.

* 26.1.a. Field Name - Identification Number
b. Size - 7
c. Type Characters - General
d. Mandatory - No
e. Definition - This field is the identification number shown in column 3a of 49 CFR 172.101 and is used to assist emergency response personnel in identifying hazardous materials.
f. Special Instructions - None

* 26.2.a. Field Name - Hazardous Substance (Reportable Quantity)
b. Size - 3
c. Type Characters - Alpha
d. Mandatory - No
e. Definition - This field indicates if an item meets the definition of a Hazardous Substance as defined in 49 CFR 171.8 and if the package quantity is large enough to be considered a Reportable Quantity.
f. Special Instructions - Enter “YES” if the item meets the definition and a “NO” if it does not. Leave the field blank if the criteria does not apply *or* cannot be determined.

27a. Field Name - Water Shipping Name
b. Size – 99
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the proper shipping name for water shipments from* either the General Index in Volume IV of the Dangerous Goods Code of the Inter-Governmental Maritime Consultative Organization (IMCO) or 49 CFR 172.101.
f. Special Instructions - If the item is regulated by both DoT and IMCO, enter the IMCO Shipping Name because Title 49 allows the use of this when a shipment will ultimately go by water. If the item is regulated by IMCO but not by DoT, enter IMCO Shipping Name. But, if an item is regulated by DoT but not by IMCO, enter the DoT Shipping Name. The data in this field will not be abbreviated. Enter "N/A" if an item is not regulated by either DoT or IMCO for this mode.

NOTE 1: If a "YES" is in both the DoT Indicator Field (Item 33) and the IMCO Indicator Field (Item 34) then the item is regulated by both 49 CFR and IMCO. The proper shipping name shown above is from the IMCO Regulations.

NOTE 2: If a "NO" is in the DoT Indicator Field. and a "YES" is in the IMCO Indicator Field then the item is regulated only by IMCO and the shipping name shown above is from the IMCO Regulations.

NOTE 3: If a "YES" is in the DoT Indicator Field and a "NO" is in the IMCO Indicator Field then the item is regulated by DoT for water shipments but not by IMCO . The shipping name shown above is from Title 49.

28a. Field Name - Water Class
b. Size - 23
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the hazard class for water shipments from either 49 CFR 172.101 or from the IMCO Regulations as applicable.
f. Special Instructions - If the item is regulated by both DoT and IMCO, enter the IMCO Class. If the item is regulated by IMCO and not by DoT, enter the IMCO class, But, if the item is regulated by DoT and not by IMCO, enter the DoT Class.

For purposes of this data system use the word "FLAMMABLE" rather than "INFLAMMABLE" when applicable. The data in this field will not be abbreviated. If an item is not regulated by either DOT or IMCO, the field may be left blank. If the classes in this field are from 49 CFR 172.101 enter the same classes as shown for the * DoT Class in item 24. When an item has more than one hazard, enter MULTIPLE HAZARDS and then list the hazard classes in the Additional Data field. If the classes are from IMCO, the following list of classes are to be entered exactly as shown so they can be recalled:

EXPLOSIVE	MULTIPLE HAZARDS
FLAMMABLE GAS	
NONFLAMMABLE GAS	
POISON GAS	
FLAMMABLE LIQUID	
FLAMMABLE SOLID	
SPONTANEOUS COMBUSTIBLE	
OXIDIZER	
ORGANIC PEROXIDE	
POISONOUS SUBSTANCE	
INFECTIOUS SUBSTANCE	
RADIOACTIVE MATERIAL	
CORROSIVE MATERIAL	
MISCELLANEOUS DANGEROUS	
DANGEROUS WHEN WET	

NOTE 1: If a "YES" is in both the DoT Indicator Field (Item 33) and the IMCO Indicator Field (Item 34) then the item is regulated by both 49 CFR and IMCO. The water class entered in this field is from the IMCO Regulations.

NOTE 2: If a "NO" is in the DoT Indicator field and a "YES" is in the IMCO Indicator Field then the item is regulated only by IMCO and the water class entered in this field is from the IMCO Regulations.

NOTE 3: If a "YES" is in the DOT Indicator Field and a "NO" is in the IMCO Indicator Field then the item is regulated by DoT for water shipments but not by IMCO . The water class entered in this field is from Title 49.

29a. Field Name - Water Label
b. Size - 25
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the label specified in 49 CFR 172.101 and the IMCO Regulations.

f. Special Instructions - If the item is regulated by both DoT and IMCO, enter the IMCO label. If the item is regulated by IMCO and not by DoT, enter the IMCO label. But, if the item is regulated by DoT and not by IMCO enter the DoT label. If a label is not required because the item is a limited quantity, enter "NONE-LTD QTY".

For purposes of this data system use the word "FLAMMABLE" rather than "INFLAMMABLE" where applicable. Data in this field will not be abbreviated except as allowed for limited quantity items. If an item is not regulated by either DoT or IMCO, the field may be left blank.

NOTE 1: If a "YES" is in both the DoT Indicator Field (Item 33) and the IMCO Indicator Field (Item 34) then the item is regulated by both 49 CFR and IMCO. The water label entered in this field is from the IMCO re gulat ions.

NOTE 2: If a "NO" is in the DoT Indicator Field and a "YES" is in the IMCO Indicator Field then the item is regulated only by IMCO and the water label entered in this field is from the IMCO Regulations.

NOTE 3: If a "YES" is in the DoT Indicator Field and a "NO" is in the IMCO Indicator Field then the item is regulated by DoT for water shipments but not by IMCO. The water label entered in this field is from Title 49.

30.a. Field Name - United Nations (UN) Number
b. Size - 4
c. Type Characters - Integer
d. Mandatory - No
e. Definition - This is the United Nations serial number assigned to a substance or article by the United Nations Committee of Experts on the Transport of Dangerous Goods.
f. Special Instructions - This field may be left blank if the item is not regulated by IMCO.

31. a. Field Name - UN Class
b. Size - 3
c. Type Characters - Numeric
d. Mandatory - No
e. Definition - This is the UN Class assigned to a specific shipping name as referenced in the General Index of the IMCO Regulations.
f. Special Instructions - Enter entire number including decimal point if applicable. Field may be left blank if the item is not regulated by IMCO.

32a. Field Name - Ammunition Compatibility Group
b. Size – 3
c. Type Characters - Alpha
d. Mandatory - No
e. Definition - This is the compatibility y group for ammunition as defined for explosives, UN Class 1, in the IMCO Regulations and as defined in DoD Standard 5154.4S.
f, Special Instructions - Data elements are left justified.

33a. Field Name - DoT Indicator
b. Size - **3**
c. Type Characters - Alpha
d. Mandatory - No

e. Definition - This is a “YES” or “No” entry indicating whether the item is regulated under DoT for water shipments.

f. Special Instructions - If the item is regulated by DoT for water shipments, enter “YES”. If the item is not regulated enter “NO”.

NOTE : It will probably be easier to complete this field and the IMCO Indicator field before determining the Water Shipping Name, Class and Label.

34a. Field Name - IMCO Indicator
b. Size - 3
c. Type Characters - Alpha
d. Mandatory - No
e. Definition - This is a “YES” or “NO” entry indicating whether the item is regulated under IMCO for water shipments.
f. Special Instructions - If the item is regulated by IMCO for water shipments, enter “YES”. If the item is not regulated, enter “NO”.

NOTE : It will probably be easier to complete this field and the DOT Indicator field before determining the Water Shipping Name, Class and Label.

35a. Field Name - Tariff 6D Shipping Name
b. Size - 100
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the proper shipping name listed in Section II of the Official Air Transport Restricted Articles Tariff 6D (Civil Aeronautics Board Regulation No. 82).
f. Special Instructions - This field applies only if there is an additional carrier imposed restriction over and above Title 49. Enter the shipping name only when it applies. Enter “N/A” if it does not apply. A “N/A” in this field does not mean that the item is not regulated for air under DoT Regulations. Other data in the field will not be abbreviated.

36a. Field Name - Tariff 6D Class
b. Size - 23
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the hazard class specified in Section II of Tariff 6D.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field it will not be abbreviated. The following list of classes are the only authorized data elements in the data field.
* They must be entered exactly this way so that the field can be recalled. When an item has more than one hazard enter MULTIPLE HAZARDS and then list the hazard classes in the Additional Data field.

RADIOACTIVE MATERIAL
POISON A
FLAMMABLE GAS
NONFLAMMABLE GAS
FLAMMABLE LIQUID
OXIDIZER
FLAMMABLE SOLID
CORROSIVE MATERIAL
POISON B
IRRITATING MATERIAL

ORM-E *
MULTIPLE HAZARDS *
COMBUSTIBLE MATERIAL
ORM-A
ORM-B
ORM-C
ORM-D
CLASS A EXPLOSIVE
CLASS B EXPLOSIVE
CLASS C EXPLOSIVE
ORGANIC PEROXIDE
ET IOLOGIC AGENT *

37a. Field Name - Tariff 6D Label
b. Size - 25
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the label specified in Section II of Tariff 6D.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field it will not be abbreviated. If an item does not require a label, enter “NONE”.

38a. Field Name - IATA Article Number
b. Size - 4
c. Type Characters - Integer
d. Mandatory - No
e. Definition - This is the 4-digit number assigned to each shipping name in the International Air Transport Association Restricted Articles Regulation, Section IV.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode.

39a. Field Name - IATA Shipping Name
b. Size - 100
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the proper shipping name from Section IV of the IATA Regulations.
f. Special Instructions - This field applies only when an item is regulated by air under the IATA Regulations. Enter “N/A” if it does not apply. Other data in this field will not be abbreviated.

40.a. Field Name - IATA Class
b. Size - 23
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the hazard class specified in Section IV of the IATA Regulations.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field it will not be abbreviated. The following list of classes are the only authorized data elements in the data field. When an item has more than one hazard enter MULTIPLE HAZARDS and then * list the hazard classes in the Additional Data field. They must be entered exactly this way so that the field can be recalled:

EXPLOSIVE

FLAMMABLE GAS
NONFLAMMABLE GAS
FLAMMABLE LIQUID
FLAMMABLE SOLID
OXIDIZING MATERIAL
POISON A
POISON B
IRRITATING MATERIAL
OPA-A
ORA-B
ORA-C
ETIOLOGIC AGENT
CORROSIVE MATERIAL
COMBUSTIBLE LIQUID
ORGANIC PEROXIDE
MAGNETIC MATERIAL
RADIOACTIVE MATERIAL
* MULTIPLE HAZARDS

41. a. Field Name - IATA Label
b. Size - 25
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the label specified in Section IV of the IATA Regulations.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field it will not be abbreviated. If an item does not require a label, enter "NONE".

42a. Field Name - AFR 71-4 Shipping Name
b. Size - 100
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the shipping name specified in Table 4-1 of AFR 71-4, TM 38-250, NAVSUP PUB 505, MCO P4030.19D, DLAM 4145.3, Preparation of Hazardous Materials for Military Air Shipment.
f. Special Instructions - This field applies only when an item is regulated by Air for Military Air Shipment. Enter "N/A" if it does not apply. Other data in this field will not be abbreviated.

43a. Field Name - AFR 71-4 Class
b. Size - 23
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the hazard class listed in Table 4-1 of AFR 71-4
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field it will not be abbreviated. The following list of classes are the only authorized data elements
* entered in the data field. When an item has more than one hazard enter MULTIPLE HAZARDS and then list the hazard classes in. the Additional Data field. They must be entered exactly this way so that the field can be recalled:

RADIOACTIVE MATERIAL
POISON A
FLAMMABLE GAS
NONFLAMMABLE GAS

FLAMMABLE LIQUID
OXIDIZER
FLAMMABLE SOLID
CORROSIVE MATERIAL
POISON B
IRRITATING MATERIAL
COMBUSTIBLE LIQUID
ORM-A
ORM-B
ORM-C
CLASS A EXPLOSIVE
CLASS B EXPLOSIVE
CLASS C EXPLOSIVE
ORGANIC PEROXIDE
ETIOLOGIC AGENT
MULTIPLE HAZARDS *

44a. Field Name - AFR 71-4 Label
b. Size - 25
c. Type Characters - General
d. Mandatory - No
e. Definition - This is the label specified in Table 4-1 of AFR 71-4.
f. Special Instructions - This field may be left blank if the item is not regulated by this mode. When data is entered in this field it will not be abbreviated. If an item does not require a label, enter “NONE”.

44.1. a. Field Name - Material Management Aggregation Code (MMAC) *
b. Size - 2
c. Type Characters - Alpha
d. Mandatory - No
e. Definition - This is a code used to associate an NSN to a particular weapons system or special program.
f. Special Instructions - None

45a. Field Name - Additional Data
b. Size - 262
c. Type Characters - General
d. Mandatory - No
e. Definition - This data field includes any unique data (especially transportation data) which applies. This field can contain overflow data that exceeds the space limitation allowed by the data system for other data elements.
f. Special Instructions - If an item is not hazardous for any mode of transportation enter "NOT REGULATED FOR SHIPPING” in this field. If an item has more than one hazard class and the term "MULTIPLE HAZARDS" is in any of the hazard class fields, list the different hazard classes in this field. *

An example of the type of data that could be put in this field is an indication as to whether or not a battery is spillable or non spillable, or some unique packaging data. Whereas the focal points are given wide latitude in what can be placed in this field, they are encouraged to be selective because of space limitations.

3.2.2.3.3. Additions, Changes, and Deletions. It will be the responsibility of the focal point to identify whether data submitted is an add, change or delete and to indicate on the TDS as follows:

a. ADD - The addition of a new MSDS or TDS to the file. It should be remembered that the Transportation Data is in a separate file from the MSDS data. Thus when the transportation data for a particular NSN, FSCM, P/N is added for the first time an action code of “A” is used even though the MSDS data is already in the file. The two files are independent of one another and adds, changes or deletes to the system affect only one file.

ACTION - No special annotation is required on the form.

b. CHANGE - The addition, change or deletion of individual data elements to an NSN, FSCM and P/N indicator already in the system file.

ACTION - Mark “CHANGE” at the top of the TDS. Input the appropriate information in the mandatory data blanks and input the corrected data in the appropriate blanks. The other nonmandatory data element blanks will not be completed. When an individual data element is being blanked out five question marks (?) will be put in the field. If the field is less thah five spaces the entire field will contain question marks.

c. DELETE - The deletion of a particular NSN, FSCM, and P/N indicator currently in the system file.

ACTION - The action code will be marked “D” on the Transportation Data Sheet. It will not be necessary to complete any data elements other than the mandatory ones.

NOTE : When the Transportation Data Sheet is submitted with a "D" only the data in the Transportation Data File will be deleted. When this data is deleted, all the transportation data elements except the mandatory ones will be deleted from the output and the following phrase will appear in the additional data field: “THIS ITEM DELETED BECAUSE OF ERRONEOUS DATA”.

The above action will not effect the data elements in the Safety Data File.

Both the Addendum Worksheet and the Transportation Data Sheet must be annotated with a “D” to delete all data elements.

When all data elements are deleted the mandatory data elements will still appear on the Cumulative Quarterly Updates until the next annual publication.

3.2.3 Data Bank Responsibility

3.”2.3.1 Input Data Procedure - Data bank clerks will enter data to tape directly from the MSDS or TDS via minicomputer with visual display. Data entry will be performed daily and input held *on* tape for weekly system processing.

3.2.3.2 Rejection of Unacceptable Data - During the data entry process, data will be screened for legibility and edited for conformance to field size and character configuration requirements. If a mandatory data element is illegible or in error, the MSDS or TDS will be returned to the originating focal point, without action, with reason for return noted. If a nonmandatory data element is illegible or in error, correct data will be entered to the system; the incorrect data element will be noted on the MSDS or TDS and returned to the focal point.

3.3 output

3.3.1 Requirements

3.3.1.1 Modes - There will be a total of 15 outputs available from the data system. They are listed below:

(a) Safety Data File Reject List
(b) Transportation Data File Reject List
(c) Weekly Update List

* (d) DoD 6050.5-LR
* (e) DoD 6050.5-L
(f) Cross-Reference List (Issued with (d) and (e) above
(g) Special Interrogation Replies
(1) NIIN vs. each mode of transportation (total of 5)
(2) NIIN vs. Hazardous Component
(3) NIIN vs. Storage Compatibility Code
(4) NIIN vs. Specification
(h) NIIN Inquiry Listing

Although the outputs will be in NIIN sequence the entire NSN will be printed on the output.

Outputs (a) and (b) above are the error rejects which tell the focal points why a specific entry was not accepted by the system. The output will be to each focal point and will consist of only those NSNS input by that particular focal point.

Output (c) above consists of the total data that was input to the system by a particular focal point during the week. It will be used by the focal point to verify data input to the system.

Output (d) above is the complete annual and quarterly microfiche output by the system. This is the major system output and is intended for use by safety, health, tr.ansportation and disposal specialists who must assure that the regulations of OSHA, DoT and EPA are followed. It should be noted that even though the disposal data has not been developed completely, disposal specialists can still utilize the other data elements in the system.

* Output (e) above consists of the same data elements as output (d) (DoD 6050.5-LR) minus. those specific data elements designated as restricted. This output is intended for distribution to those activities who do not have a need to know sPecific Data elements designated by the manufacturer. The focal points will be responsible for determining which activities should receive outputs (d) and (e).

Output (f) is the Cross-Reference List. It is published on microfiche and is distributed along with DoD 6050.5-LR and DoD 6050.5-L. It cross-references a manufacturers name and part number to a National Stock Number.

Output (g) consists of 8 special interrogation replies which gives the NIINs that match with a particular hazard class in each of the five modes of transportation, with a particular hazardous component identified by the NIOSH Code for that component, with a particular specification, and with a particular storage compatibility code. These outputs will consist of either a listing of the NSNS (in NIIN sequence) that matched the specific data element or the total file data on those NSNs.

* Output (h) consists of the total file output of any NSN requested. By requesting this output a focal point can obtain on paper the total file output for specific NSNS as a subset of DoD 6050.5-LR. This will be useful when a shop or work area uses a limited number of NSNS and wants the data for these rather than the entire DoD 6050.5-LR.

3.3.1.2 Frequency. The various outputs are available from the system as shown below:

(a) Safety Data File List - Weekly
(b) Transportation Data File Reject List - Weekly

(c) Weekly Update List - Weekly
(d) DoD 6050. 5-LR- Annually with quarterly cumulative updates. *
(e) DoD 6050.5-L - Annually with quarterly cumulative updates. *
(f) Cross-Reference List - Annually with quarterly cumulative updates.
(g) Special Interrogation Replies - When requested
(h) NIIN Inquiry Listing - When requested

3.3.1.3 Medium. The physical form of the outputs are described below:

(a) Safety Data File Reject List - Paper
(b) Transportation Data File Reject List - Paper
(c) Weekly Update List - Paper
(d) DOD 6050.5-LR - Microfiche (tape when requested) *
(e) DoD 6050.5-L - Microfiche (tape when requested) *
(f) Cross-Reference List - Microfiche
(g) Special Interrogation Replies - Paper
(h) NIIN Inquiry Listing - Paper

3.3.1.4 Distribution

A. The Safety Data File, Transportation Data File and Weekly Update Lists will* be distributed directly from the Data Bank to the focal points. For the DoD 6050. 5-LR, DoD 6050.5-L and the Cross-Reference Lists, the Data Bank will provide either a tape or masterfiche to a contractor for development of microfiche for service/agency distribution.

B. The Special Interrogation Replies and NIIN Inquiry Listing will be distributed directly to the requesting activity.

3.3.2 Output Data Elements. This section lists and explains the data elements on the output products. It is written so that this section can serve as a users guide. Each data element is listed with the Field Name; the Output Header, which is exactly as the header appears on the output; a brief definition of the data; and any additional explanation that may be necessary.

*

3.3.2.1 DoD 6050.5-LR

A. This output consists of two microfiche frames per NSN/LSN, FSCM and P/N Indicator. Whenever any of these three elements are changed, a separate set of two frames will be printed on the microfiche sheet. Each microfiche has a total of 270 frames. One is reserved for the index and the other 269 contain data. With two frames per NSN/LSN, FSCM, P/N Indicator it will be possible to put 134 complete sets of data on each fiche and one frame of another set. Because there can be more than one manufacturer for an item there can be multiple entries for the same NSN/LSN. The change will be either the FSCM field or the P/N Indicator field. The user should look through all entires for the particular NSN/LSN until he finds the entry for the correct manufacturer and part number.

B. A cross-reference of P/N to NSN will be included with each distribution on separate microfiche.

c. The top line of Frame 1 contains the general header explaining which publication is being viewed. For example the basic publication will have the header "HAZARDOUS ITEM BASIC PUBLICATION".

* 3.3.2.1.1 Detailed Listing of Frame 1 Data Elements. Below is a list of the data elements on Frame 1 of DoD 6050.5-LR. The actual output format is shown in section 3.3.3.1.1.

1.a. Field Name - NSN/Local Stock Number (ACN)
b. Output Header - NSN
c. Definition - This field consists of the National Stock Number (NSN), the Local Stock Number, Activity Control Number, or a Focal Point Assigned Stock Number. This last number is identified by the seventh position containing the same, letter as the focal point indicator. It is used when an item does not have an NSN or Local Stock Number assigned but is desirable to retain the data in the system. This number was devised purely as a means of inputting the data to the system and serves no other purpose.
d. Explanation - None

20a. Field Name - Federal Supply Code for Manufacturers
b. Output Header - FSCM
c. Definition - The unique Code assigned to any contractor who does business with the Government. FSCMS are also assigned to various military and *civilian* Government agencies as identification.
d. Explanation - The FSCM codes are assigned by the Defense Logistics Service Center, (DLSC) Battle Creek, Michigan.

3a. Field Name - Item Manager
b. Output Header - MGR
c. Definition - This is a code for the activity which has item management responsibility for an item. The codes *are* found in DIDS Procedures Manual, DoD 4100.39-M, Vol 10, Chapter 4, Table 47.
d. Explanation - This data will be automatically fed into the data system from the DLSC files.

4a. Field Name - Focal Point Indicator
b. Output Header - F P IND
c. Definition - This is the one position alpha code indicating the focal point responsible for inputting the data.
d. Explanation - The indicators and their respective focal points are shown below:

A - Army
C - United States Coast Guard
D - Defense Logistics Agency
F - Air Force
G - General Services Administration
M - Marine Corps
N - Navy (also responsible for the Marine Corps Input)
P - Defense Mapping Agency
S - National Security Agency

The addresses and telephone numbers of the focal *points* are *given in* Appendix F.

5.a. Field Name - Part Number Indicator
b. Output Header - PN IND
c. Definition - This is a one- position code developed to facilitate program processing by eliminating the necessity for matching part numbers position by position.
d. Explanation - The part number indicator may be of significance to the user when there has been a change in the product but the name of the product has remained the same,

6a. Field Name - Part Number/Trade Name
b. Output Header - PART NUMBER/TRADE NAME
c. Definition - This is the name or number that the manufacturer uses to designate his product. The terms Part Number, Trade Name, or Synonym are used interchange ably.
d. Explanation - This field can, along with the P/N, show a date. The inclusion of this date indicates that the product, and its hazards, were changed as of this date, The user should look for new hazardous data shown for the period after the change was made. Also, this field can refer to a specification number. When such a number is included in this field it means that the product is made according to a requirements specification and the chemical composition is the same from manufacturer to manufacturer and there is no need to look for a specific part number. Also the FSCM code will be a general one assigned to Federal or Military Specifications such as 81348 or 81349.

7a. Field Name - Action Code
b. Output Header - ACT CD
c. Definition - This is a one-position code to indicate whether the data is an add, change or delete.
d. Explanation - An "A" in the field means the data for that particular NSN/LSN, FSCM and P/N Indicator was input for the first time. An " A" will appear to the left of the NSN.

A "C" in the field means that a particular data element was changed for a specific NSN/LSN, FSCM, P/N Indicator already in the system. When a particular data element is changed *since* the last publication an asterisk (*) will appear immediately to the left of that data element for this one publication only. Also, a "C" will appear to the left of the NSN.

A "D" in the field means that the NSN/LSN, FSCM, P/N Indicator was deleted because it was not hazardous and was not supposed to be in the system. The phrase "THIS ITEM DELETED BECAUSE OF ERRONEOUS DATA" will appear in the Additional Data and Supplemental Data Fields.

8.a. Field Name - Date
b. Output Header - DATE
c. Definition - This is the date that the focal point reviewed the data and input it to the system. It is used to determine the general age of the data.
d. Explanation - The julian date format is used.

9.a. Field Name - Page Number
b. Output Header - PAGE NR
c. Definition - This is the computer assigned entry for the particular frame. The computer automatically counts the number of frames of entry.

d. Explanation - None

10. a. Field Name - Proprietary Indicator
b. Output Header - PROPRIETARY
c. Definition - This is a "YES" or "NO" entry which indicates that a contractor considers his data to be proprietary and has so stated on the MSDS as covered in the appropriate clause in the DAR.
d. Explanation - A “YES” in this field will cause selected data elements to be deleted from the Restricted Hazardous Information List which will be discussed in section 3.3.2.2.

11 .a. Field Name - Manufacturer
b. Output Header - MANUFACTURER
c. Definition - This is the name of the manufacturer of the product. It includes divisions but not addresses. This field also can include the dist ribut or's name. If both manufacturer and distributor are included, one of the two will be preceded by "Mfg" for manufacturer or "Dist" for distributor.
d. Explanation - None

12. a. Field Name - Emergency Telephone Number
b. Output Header - EMERGENCY TELE NO
c. Definition - This is the telephone number to be called only in emergency situations when the focal point cannot be reached (i.e. during nonduty hours) .
d. Explanation - None

13.a. Field Name - Item Name
b. Output Header - ITEM NAME
c. Definition - This is the approved item name established in Section A of the Federal Item Name Directory (H-6) for the Federal Cataloging System. It is established in the Total Item Name Record.
d. Explanation - None

14.a. Field Name - Unit of Issue
b. Output Header - UI
c. Definition - The standard unit of issue abbreviation from the DIDS Procedures Manual (DoD 4100.39-M, Vol 10, Chapter 4, Table 53).
d. Explanation - Below is a list of the abbreviations and the term they represent:

AM - *Ampoule
AT - Assortment
AY - Assembly
BA - *Ball
BD - *Bundle
BE - Bale
BF - Board Foot
BG - *Bag
BK - *Book
BL - *Barrel
BO - *Bolt
BR - *Bar
BT - *Bottle
BX - *Box
CA - *Cartridge
CB - *Carboy
CD - Cubic Yard
CE - *Cone
CF - Cubic Foot
CK - *Cake
CL - *Coil
CN - *Can
co - *container
CY - Cylinder
Cz - Cubic Meter
DR - *Drum

DZ - Dozen
EA -Each
FT - Foot
GL - Gallon
GP - Group
GR -Gross
HD - Hundred
HK - *Hank
JR - *Jar
KT - Kit
LB - Pound
LG - *Length
LI - Liter
MC - Thousand Cubic Feet
ME - Meal
MR - M e t e r
Mx - Thousand
OT - Outfit
OZ - Ounce
PD - *pad
PG - *Package
PM - Plate
PR - Pair
PT - Pint
Pz - *packet
QT -Quart
RA - Ration
RL - *Reel
RM - Ream
RO - *Roll
SD - *Skid
SE - set
SF - Square Foot
SH - Sheet
SK - Skein
SL - *spool
so - Shot
SP - *St rip
Sx - *Stick
SY - Square Yard
TN - Ton
To - Troy Ounce
TU - *Tube
VI - *Vial
YD - Yard

NOTE : Those terms preceded by an asterisk (*) require a quantitative expression which is the Unit of Issue Container Quantity (Item 15).

15. a. Field Name - Unit of Issue Container Quantity
b. Output Header - UI CONTAINER **QTY**
c. Definition - The quantitative expression for nondefinitive units of issue (Example: **5** gal, 55 gal, 100 lb).
d. Explanation - None

16. a. Field Name - Type of Container
b. Output Header - TYPE OF CONT
c. Def init ion - The material of construction of the container (Example: metal, polyethylene).
d. Explanation - None

17.a. Field Name - Net Unit Weight
b. Output Header - NET UNIT WT
c. Definition - The net weight of the hazardous material in the container (Example **450** lbs, 100 kg).
d. Explanation - None

18. a. Field Name - Magnetism
b. Output Header - MAG/MILGAUS
c. Definition - The field strength of a material that exceeds 0.002 gauss or more at a distance of **7** ft from any point on the package surface, or is of such mass that it could affect aircraft instruments.
d. Explanation - Units of the data are milligauss.

19.a. Field Name - DOT Exemption Number/DoD Certification of Equivalency
b. Output Header - EXEMPTION NO
c. Definition - The number of the exemption granted by either the DoT or the number of the certificate of equivalency issued by the DoD under the authority given in 49 CFR 173.7a.
d. Explanation - None

20. a. Field Name - Aerosol Propellant
b. Output Header - AEROSOL PROPELLANT
c. Definition - The chemical name of the material which causes the contents of an aerosol container to be expelled, (i.e. dichlorodifluoromethane).
d. Explanation - In addition to this chemical appearing in the aerosol propellant field, if it is hazardous it will appear in the hazardous components section.

21 .a. Field Name - Specification
b. Output Header - SPECIFICATION
c. Definition - This is the basic specification or standard under which an item is bought. The field does not include revision numbers, types, grades, classes, etc.
d. Explanation - This field contains only the numbers for Military Specification, Military Standards, DoD Specifications, Federal Specifications, and Federal Standards.

22a. Field Name - Radioactivity
b. Output Header - RADIOACTIVITY
c. Definition - The specific activit y of any material that emits ionizing radiation in excess of 0.002 microcuries per gram.
d. Explanation - The units are included in the data field. The abbreviations for the units are as follows:

CI - Curies
MCI - Millicuries
UCI - Micro curies

23a. Field Name - Form
b. Output Header - FORM
c. Definition - This field indicates if the radioactive material is in a normal form as defined *in* **49** CFR 173.389(d) or in special form as defined in **49** CFR 173. 289(g). This field also indicates if the material is a solid, liquid, or gaseous state.
d. Explanation - This field is completed only if field 22 (Radioactivity) is completed. It includes the abbreviation for Normal or Special Form and the abbreviations for the physical state. The following are the abbreviations and the terms for which they stand:

NORM - Normal
SPEC - Special
SOL - Solid
LIQ - Liquid
GAS - Gaseous

24. a. Field Name - Transport Group
b. Output Header - TR GP
c. Definition - This is the transport group assigned to a specific radionuclide in 49 CFR 173.390(a). The data is expressed in Roman Numerals.
d. Explanation - None

25a. Field Name - Nuclear Regulatory Commission (NRC) License Number.
b. Output Header - NRC LIC NUMBER
c* Definition - This is the number of the license granted by the NRC. It is given to the military agency that manages the item.
d. Explanation - None

26a. Field Name - Chemical Name and Synonyms
b. Output Header - CHEMICAL NAME
c. Definition - This is the chemical name of the item and applies only to products consisting of a single element or compound, such as oxygen, or methyl ethyl ketone.
d. Explanation - If the name exceeds the allowed space it will be found in the supplemental data section. This data element should not be confused with "CHEMICAL NAME" of the hazardous components which appears in another field. For single elements it will, however, be the same as the hazardous component.

27a. Field Name - Chemical Family
b. Output Header - CHEMICAL FAMILY
c. Definition - This is the generic name of the chemical family of the item such as "acid" or "ketone".
d. Explanation - This field applies only to single elements and compounds.

28a. Field Name - Formula
b. Output Header - FORMULA
c. Definition - This is the chemical formula of the item.
d. Explanation - This field applies only to single elements or compounds, not to the formulation of a mixture. Subscripts in the formula are preceded by an asterisk (*) because the computer cannot print below the line (Example: $C_2H_5COCH_3$ would be expressed as C*2H* 5COCH*3).

29a. Field Name - NIOSH Code
b. Output Header - NIOSH NO
c. Definition - This is the accession number assigned to an individual chemical in the Registry of Toxic Effects of Chemical Substances which is published and maintained by the National Institute for Occupational Safety and Health .
d. Explanation - This number is used so that the computer can recall the hazardous components vs. the NSN/LSN and does not have any specific significance to the user. This number is repeated for the five most hazardous components.

30.a. Field Name - Chemical Name of Hazardous Component (Ingredient)
b. Output Header - CHEMICAL NAME
c. Definition - The standard most commonly used chemical name of the hazardous components of the item.
d. Explanation - For radioactive items, the radionuclide will appear in this field. The name is included for the five most hazardous components.

31.a. Field Name - Percent of Hazardous Component (Ingredient).
b. Output Header - PCT
c. Definition -.The approximate percentage of each hazardous component by weight.
d. Explanation - If the percentages are volume the following phrase will be found in supplemental data: “ITEM COMPOSITION IS IN PERCENT BY VOLUME”. Otherwise the percentages are assumed to be by weight. If the field has "< “ or ">" followed by a number, this means the percentage is “Less Than” or “Greater Than” the amount shown. The percentage is included for the-five most hazardous components.

32a. Field Name - Threshold Limit Value (TLV)
b. Output Header - TLV
c. Definition - The TLV is a guide based upon the best available information established by the American Conference of Governmental Industrial Hygenists for concentrations of airborne substances in workroom air. They include both time weighted averages based on conditions which it is believed workers may be repeatedly exposed to day after day without adverse effects. The TLVS are intended to serve as guides for use by professionals in the control of health hazards, rather than definitive marks between safe and dangerous concentrations. The data field is for individual components of the item rather than the entire mixture or compound.
d. Explanation - The units of the data are included in the field. They are:

MPPCF-Millions of Particles per cubic foot of air.
MG/CUM-Milligrams of Particulate per cubic meter of air.
UG/CUM-Micrograms of Particulate per cubic meter of air
PPM-Parts per million of air by volume.
F\CUM-Fibers per cubic meter of air.
F/CC-Fibers per cubic centimeter of air.

For ceiling or skin notation, the TLV is preceded with a “C” or “S”.

33a. Field Name - DoT Shipping Name
b. Output Header - DOT SHIPPING NAME
* c. Definition - This is the proper shipping name for shipments referenced in 49 CFR 172.101.
d. Explanation - If the item is not regulated by this mode the term “N/A” for not applicable will appear in the field.

34a. Field Name - DoT Hazard Class
b. Output Header - CLASS
c. Definition - This is the hazard class for shipments referenced in 49 CFR 172.101.
d. Explanation - This field may be left blank if the item is not reg-
*ulated by this mode. If the term “MULTIPLE HAZARDS” is in the field refer to Additional Data for a listing of the hazard classes.

35a. Field Name - DoT Label
b. Output Header - LABEL
c. Definition - This is the label specified in 49 CFR 172.101.
* d. Explanation - If an item is a limited quantity and does not require a label for surface, but does require one for air, the phrase "NONE-LTD QTY" will be used. If Title 49 specifically says a label is not required the word “NONE” will appear.

36a. Field Name - Mode Indicator
b. Output Header - MODE
c. Definition - This field consists of the same symbols that are in Column 1 of 49 CFR 172.101. These symbols indicate the mode of shipment under which the item is regulated. A "+" in the field indicates the item is regulated regardless of whether or not the item meets the hazard class definition.
d. Explanation - A blank of N/A in the field indicates that the criteria specified in Column 1 of 49 CFR 172.101 does not apply.

36.1.a. Field Name - Identification Number
b. Output Header - ID NO
c. Definition - This field is the identification number shown in column 3a of 49 CFR 172.101 and is used to assist emergency response personnel in identifying hazardous materials.
d. Explanation - This data element is required on shipping papers and is referenced in the "Emergency Response Guide" published by the DOT.

36.2.a. Field Name - Hazardous Substance (Reportable Quantity)
b. Output Header - RQ
c. Definition - This field indicates if an item meets the definition of a Hazardous Substance as defined in 49 CFR 171.8 and if the package quantity is large enough to be considered a "Reportable Quantity".
d. Explanation - A "YES" in the field indicates that the item is a reportable quantity. A "NO" indicates that it does not meet the definition. A blank indicates that the criteria does not apply because the shipping name does not require the determination or that not enough data is available to make a determination.